

THE COST OF HOUSING HELP ON THE FARM

A. SHULTIS,¹ L. W. NEUBAUER,² AND B. C. RUCKER³

California farmers have recently found the lack of housing facilities a handicap in obtaining or holding the help necessary to continue their operations. Agricultural Extension Service Farm Labor offices during 1943 frequently reported unfilled jobs and unplaced applicants for the work offered, because housing was lacking or unsuited to the workers available. Single men could not be placed because board and room were not provided, or married men could not be placed because of a lack of satisfactory family housing units. Some farmers intend to provide the needed facilities, in order to maintain production through the war emergency. Priorities and allocations of critical materials are obtainable for this purpose, though the materials themselves may be difficult to find. In the future, opportunities may appear for obtaining salvaged materials from certain temporary war-housing projects. One must consider the cost of various types of facilities in order to select those that are justifiable.

Both seasonal and year-round farm workers must be housed somewhere--on the farm where they work, off the farm in public or private camps, or in rented or owned quarters of their own choice. Aside from transportation to and from work, there may not be much difference in cost regardless of where workers are housed, provided such facilities are adequately used. This leaflet considers costs for farm facilities only. Any comparison with costs off the farm will require local investigation of the opportunities available. Costs of housing on the farm may be borne entirely by the farmer, or in part by the worker through rental charges or a lower wage rate to workers so housed.

A consideration of housing costs properly starts with the original cost or capital outlay. Examples presented in this leaflet are based on certain units for which plans, bills of material, and cost estimates at 1943 prices have been previously developed by the College of Agriculture. Leaflets describing the buildings referred to may be obtained at Agricultural Extension Farm Ad-

¹Extension Specialist in Farm Management and Associate on the Giannini Foundation of Agricultural Economics.

²Assistant Professor of Agricultural Engineering and Assistant Agricultural Engineer in the Experiment Station.

³Assistant State Supervisor, Housing and Transportation, Farm Labor Project.

visor and Farm Labor offices in California. The cost of essential minor equipment usually furnished and the value of an adequate area of land at \$200 an acre are included in the original cost of each group or type of housing. Costs of operation on an annual basis (such as interest on investment, depreciation, and the like) are then computed.

Interest on investment: Interest on about one half the original investment is computed at 5 per cent. One half the investment, except for land, is used instead of the full cost, since the value of buildings and equipment will decline, year by year, from the original cost to zero.

Depreciation: The original cost of facilities that wear out or decline in value through age or use is spread over their useful life by means of an annual charge, the depreciation. This charge was estimated for each item in every group. The canvas for the canvas cabin and some of the equipment were assumed to have a useful life of five years. Buildings in the B-H plan series were considered to last ten to twenty years, depending upon the construction. Employees' cottage C-160 was given a life of twenty years; house C-156A, thirty.

Repairs and maintenance: The annual cost of maintenance and repairs was calculated at 2 to 3 per cent of the cost of buildings. Estimates for the equipment are also included.

Fire insurance: Fire insurance is estimated at an annual cost of 50 cents per \$100 of insurance. Insurance coverage was assumed to average two thirds the original cost of the buildings.

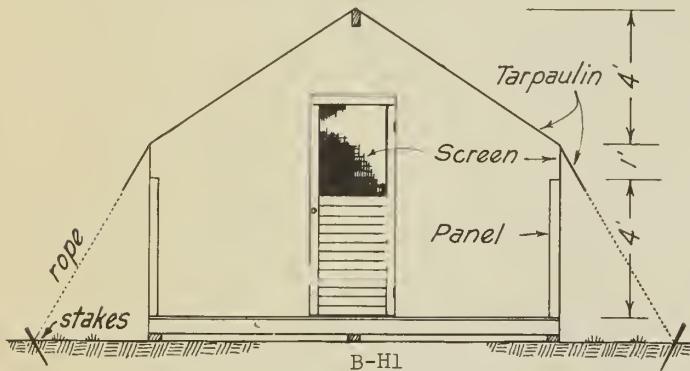
Taxes: For the average life of the facilities, taxes are estimated at 1/2 per cent of the total original cost of land and buildings.

Operating costs: The costs of water, electricity, fuel, sanitary supplies, and care or janitor work are estimated. These figures will probably need considerable adjustment for different and individual farm conditions and practices. (Some costs, such as fuel and electricity, may be met by the occupant of a house.) These operating costs are shown on a monthly basis and are assumed to be required only for the number of months facilities are used.

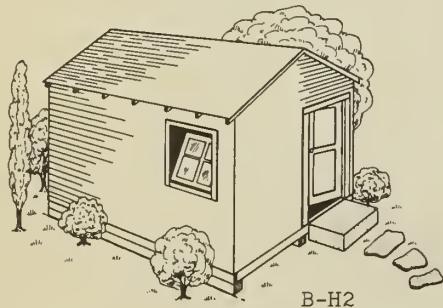
The facilities may be seasonal or year-round and for families or single men. They may also be in single units or in groups where several

units are served by a single bathhouse or mess hall. A single family unit may house one or more workers. Two to four single men could be housed in most of these family units. The following are brief descriptions of the seven family units for which costs appear in table 1:

Example 1: A campsite with a 12×14 foot concrete tent platform, privy, table, water supply, garbage can, and 0.05 acre of land; total cost \$90. This would accommodate a migratory family who own a complete camping outfit. It would be suitable for a farm with a short work period of 1 to 2 months, particularly where the type of work would furnish employment for several members of the family, as in picking cotton, hops, or walnuts. If 50 days of work were obtained annually from such a unit, the cost would be about 32 cents a day.



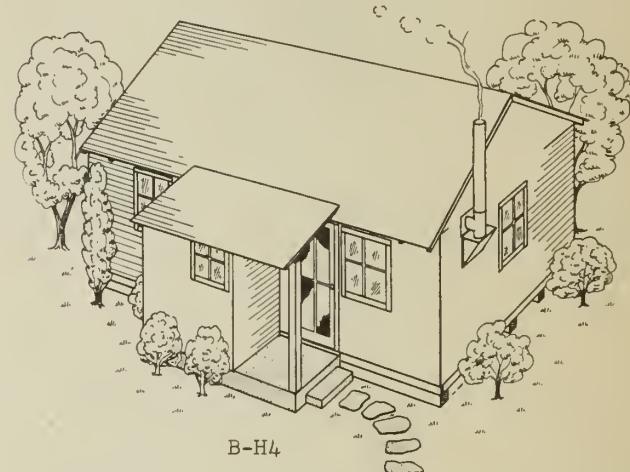
Example 2: A canvas-roofed 1-room cabin, plan B-H1, 12×14 feet, cost \$125, with privy, table, cupboard, bed, water supply, garbage can, and 0.05 acre of land; total cost \$200. The cabin is portable and for maximum life should be taken down and stored when not in use. By housing families who have no tent, it would increase the chance of obtaining the helpers needed. A longer period of use is required to reach a reasonable cost--55 cents a day with 75 days of work. It is better adapted than the campsite alone for seasonal workers who remain 75 to 100 days at a season when rain might be expected.



Example 3: A 1-room frame cabin, plan B-H2, 10×12 feet, cost \$200, with privy, table, cupboard, bed, stove, water supply, garbage can, and 0.05 acre of land; total cost \$300. This unit would serve a migratory couple for a longer period and during more adverse weather. If used 4 months

to provide 100 days of work by one person, it would cost 59 cents a day.

Example 4: A 1-room frame cabin with shower bath, plan B-H2 optional, 10×18 feet, cost \$300, with privy, stove, hot-water tank, sink, table, cupboard, bed, garbage can, and 0.05 acre of land; total cost \$400. This unit would meet a wider range of needs than no. 3 and could be duplicated several times, since the bathing facilities required in a labor camp are provided. The cost, \$1.00 a day for 75 workdays or 78 cents for 100 workdays, is not excessive.



Example 5: An all-year 2-room cabin with bath and toilet, plan B-H4, 16×24 feet, with electric wiring and plumbing, cost \$700; with stove and other facilities and 0.07 acre of land, total cost \$800. This is about the most economical all-year family unit with new construction at current labor and material costs. The use of salvaged material and off-season farm labor in the construction could reduce the original cost. With 150 days of work the cost per day would be 80 cents.



Example 6: A 3-room employees' cottage with bath, plan C-160, 16×22 feet, cost \$1,000; with certain equipment and 0.1 acre of land, total cost \$1,200. Although it has slightly less floor space than the cabin described above, its con-

struction and appearance might justify the higher original cost. If it is used the year around for 300 days of work, the cost per day is 67 cents, as compared with 50 cents for no. 5.

Example 7: A 5-room house with bath, plan C-156A, 23 x 54 feet, cost \$2,500; with certain extra facilities and 0.13 acre of land, total cost about \$2,800. This unit is expensive for common farm labor, but is of the type usually required by skilled permanent employees and foremen. The total cost is about \$30.00 a month or \$1.17 a day where 300 days of work are obtained from the occupant.

The significant cost of housing facilities is the amount per day of work obtained. These figures, as shown in table 1, are the total annual

overhead cost plus the operating cost for the appropriate number of months divided by the days



C-156A

TABLE 1
Costs for Single-Family Units

	Seasonal facilities				All-year cottages		
	Example 1, camp-site	Example 2, 1-room canvas	Example 3, 1-room cabin	Example 4, 1-room and bath	Example 5, 2-room cabin	Example 6, 3-room cottage	Example 7, 5-room house
Size of building, feet...	....	12 x 14	10 x 12	10 x 18	16 x 24	16 x 22	23 x 34
Original investment, dollars	90	200	300	400	800	1,200	2,800

Overhead and operating costs, dollars

Annual overhead costs:							
Interest on average investment	2	5	7	10	20	30	70
Depreciation	9	23	31	41	45	65	103
Repairs, maintenance	3	8	10	12	18	25	60
Fire insurance	0	1	1	1	3	4	9
Taxes	0	1	2	2	4	6	14
Total annual overhead costs	14	38	51	66	90	130	256
Monthly operating cost:							
Water, fuel, electricity, etc.	1	1	2	3	5	6	8
Total overhead and operating costs:	15	39	53	69	95	136	264
With 1 month use . . . . .	....	....	....	....	150	202	352

Cost per day of work obtained from occupant with 25 workdays per month of occupancy, dollars

Workdays per season of use:							
25 (1 month)	0.60	1.56	2.12	2.76	3.80	5.44	10.56
50 (2 months)	0.32	0.80	1.10	1.44	2.00	2.84	5.44
75 (3 months)	0.23	0.55	0.76	1.00	1.40	1.97	3.73
100 (4 months)	0.18	0.42	0.59	0.78	1.10	1.54	2.88
150 (6 months)	0.13	0.29	0.42	0.56	0.80	1.11	2.03

Cost per day of work obtained from occupant with year-round occupancy of house, dollars

Workdays per year:							
150 . . . . .	....	....	....	....	1.00	1.35	2.35
200 . . . . .	....	....	....	....	0.75	1.01	1.76
250 . . . . .	....	....	....	....	0.60	0.81	1.41
300 . . . . .	....	....	....	....	0.50	0.67	1.17
350 . . . . .	....	....	....	....	0.43	0.58	1.01

of work. The number of days an occupant of year-round housing is employed depends on the labor requirement of the farm, the worker's industry and health, and the local customs regarding Sundays, holidays, and vacations. Employment of a year-round worker may vary from 150 to 350 days. The costs per day of work shown in table 1 for year-round facilities used over 6 months are based upon all-year occupancy, with water, electricity, and fuel included. When the employee pays rent or certain operating costs such as fuel and electricity, the expense to the farmer would be less.

Table 1 shows a wide range in costs per day of work obtained, from a low of 13 cents in the campsite furnishing 150 workdays up to \$10.56 in the most expensive house used 1 month for 25 workdays. To use this schedule the reader should estimate the days of work he will obtain from occupants of the contemplated facilities that are closest to the cost of the examples shown. All the daily costs for single-family units are based upon a single worker. If 1 1/2 or 2 workers are furnished by a building, the costs per day of work obtained would be two thirds or half of the rates shown.

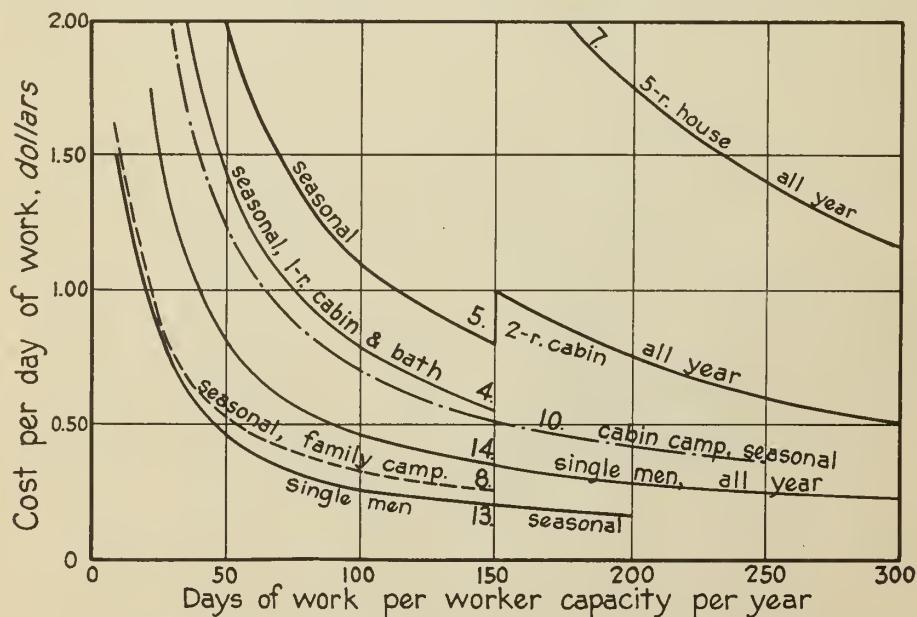
Where the period of use of any facility is so short as to result in a high cost per day of work, the employer may well investigate the local cost of housing his workers off the farm and transporting them back and forth. He must not forget that some prefer living off the farm. The available rental facilities and tourist camps in the community and the prices charged, plus the expense of daily transportation, should be considered and compared with possible costs on the farm.

As soon as housing is provided on the farm for more than 5 employees, the state laws and regu-

lations pertaining to labor camps apply. Anyone contemplating such facilities should obtain the list of requirements from the State Division of Immigration and Housing at Sacramento, Los Angeles, or San Francisco. A shower head and toilet seat must be provided for every 15 persons, with separate provisions for men and women. This requirement results in a certain minimum economical size of labor camp, since it would cost little more to provide a community bathhouse for 20 families than for 5. Family units nos. 1, 2, and 3 may be duplicated to a total of five; but as soon as more than 5 workers are housed, bath facilities must be provided. No. 4, which contains such facilities, could be duplicated indefinitely.

There are many possible combinations of various family units and bunkhouses for single men. Several examples have been selected for presentation. The first three (nos. 8, 9, and 10 in table 2) are of seasonal family camps for 20 families with the same family units provided as in the first 3 single-family examples in table 1, but supplemented by a bathhouse. When single men or women live in a camp or bunkhouse, board must also be available. To provide and operate a mess hall with a hired cook for less than 16 to 20 workers would probably not be economical. The cost of housing mess facilities, but not their equipment or operating costs, is included in nos. 13 and 14 only. The following brief explanations apply to the examples in table 2:

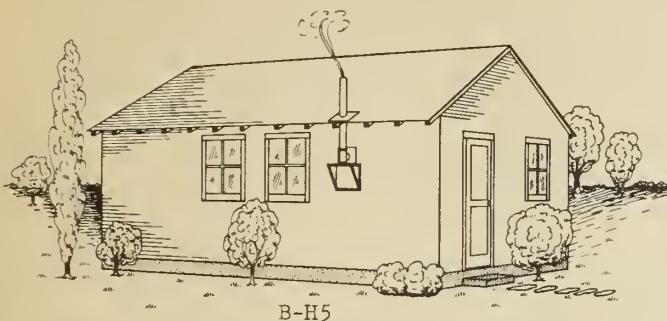
Example 8: A seasonal 20-family camp with bathhouse, plan B-H5, 16 x 36 feet, cost \$900; 6 three-seat privies at \$45 each; 20 tent platforms, 12 x 14 feet, at \$25 each; 20 tables at \$12 each, other equipment at \$290, and 1 acre of land at \$200; total cost \$2,400. This camp would meet minimum essentials for 20 families with camping outfits, at 51 cents a day where 50 days



Housing cost per day of work for numbered examples selected from tables 1 and 2.

of work are provided by each family unit. If the units furnished an average of 1 1/2 workers, the cost would be reduced to 34 cents; and if 2

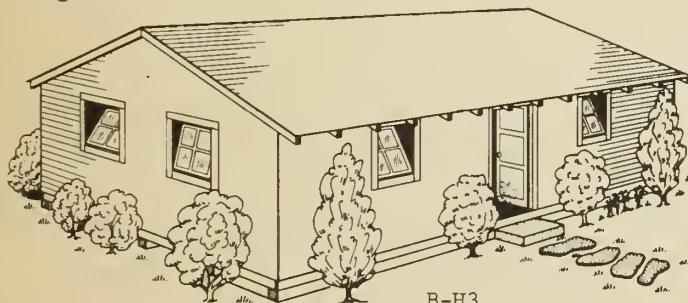
meet those requirements. Where it is used to capacity for a 4-month period, it should provide 600 workdays at a cost of 29 cents a day.



workers were housed per unit, the cost per day of work obtained would be reduced to 26 cents for the 2-month period of use.

Example 9: A seasonal 20-family canvas-cabin camp. This unit, otherwise the same as no. 8, has 20 cabins, plan B-H1, 12 x 14 feet, at \$125 each, with additional equipment as in no. 2 for each unit; total cost \$4,700. With each family unit providing 75 workdays, the cost is 72 cents a day. The comparable cost in no. 2, a single unit without bath, is 55 cents. The provision of bathing facilities increases both overhead and operating costs.

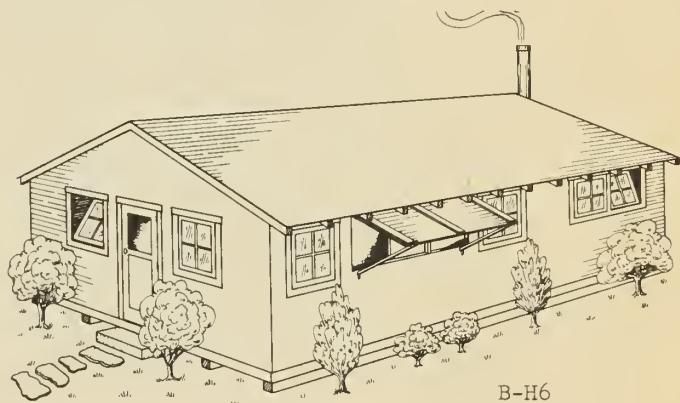
Example 10: A seasonal 20-family frame-cabin camp--similar to no. 9, but with frame cabins, plan B-H2 at \$200 each; total cost \$6,400. The cost per day of work obtained with 100 days from each unit over a 4-month period would be 69 cents. If 20 individual units of no. 4, which includes a shower in each cabin, were substituted, the community bathhouse and responsibility for its care would be eliminated, but the cost for comparable use would be 79 cents a day, or 10 cents higher.



Example 11: A 6-man seasonal bunkhouse, plan B-H3, 16 x 24 feet, cost \$525; one privy at \$45; cots, mattresses, and so forth, at \$25 per man; wash trough \$10; 0.1 acre of land; total cost \$750. This bunkhouse does not include the necessary bathing and board facilities, but is shown as a separate unit for consideration as an addition to existing facilities that would



Example 12: A 6-man year-round bunkhouse, plan C-21, 27 x 37 feet, containing 6 private bedrooms, living room, and bath. The building costs about \$2,800 under present conditions; with equipment at \$30 a man and 0.1 acre of land, total cost \$3,000. This is a rather de luxe unit for housing permanent year-round employees where board facilities are available. The cost per man, if the bunkhouse is used to capacity for 300 workdays a year, is 34 cents per day of work, or about \$10 per month per worker.



Example 13: A seasonal labor camp for 20 men. This unit is composed of 5 canvas-covered cabins B-H1, 12 x 14 feet, holding 4 men each, at \$125; 1 privy at \$45; 1 small bathhouse with 2 shower heads and washing facilities, costing about \$300; and a mess hall B-H6, 16 x 24 feet, costing \$600; total cost, with cots and extra equipment and 0.5 acre of land, \$2,070. This unit would be a suitable seasonal camp, with required bath and board facilities, for 20 single men. If the camp is filled to capacity for 4 months, or 100 workdays, the housing cost amounts to 26 cents a day. This includes the mess hall, but not its equipment or operation. If 3 of the seasonal bunkhouses described in no. 11 housing 18 men were used in place of the canvas cabins, the original cost would be increased by about \$900, and the cost per workday at 100 days per worker would be 34 cents.



Example 14: All-year housing for 18 men. This group comprises a 12-man bunkhouse with bath, plan B-H9, 20×52 feet, with all-weather construction, cost \$2,400; one 6-man bunkhouse,

plan B-H3, 16×24 feet, \$650; one mess hall B-H6, 16×24 feet, \$650; total cost, with certain equipment and 0.5 acre of land, \$4,300. This unit provides no private rooms, but meets all space and sanitation requirements for housing single men. If it is used to capacity for a 10-month period, the cost per day of work obtained from the occupants would be 24 cents, which is lower than the cost for no. 13 used only 4 months. As the length of use increases, better facilities can be provided with no increase in the cost per day of work obtained.

TABLE 2
Costs for Group-Housing Units

	Seasonal 20-family camps			Bunkhouses 6-men, no mess		Bunkhouses with bath and mess hall	
	Example 8 camp	Example 9 canvas cabins	Example 10 frame cabins	Example 11 seasonal, no bath	Example 12 year, with bath	Example 13 seasonal, 20 men	Example 14 year, 18 men
Original investment, dollars	2,400	4,700	6,400	750	3,000	2,070	4,300
Cost per unit or worker, dollars	120	235	320	125	500	104	239
Overhead and operating costs, dollars							
Annual overhead costs:							
Interest on investment	65	123	165	19	76	54	110
Depreciation	210	530	680	87	170	230	350
Repairs, maintenance.	80	180	200	25	74	86	140
Fire insurance	4	14	19	3	10	7	14
Taxes	12	23	32	4	15	11	21
Total overhead costs.	371	870	1,096	138	345	388	635
Monthly operating costs:							
Water	6	6	6	1	2	5	4
Electricity	3	5	6	1	2	5	6
Fuel for hot water and heating	10	10	10	0	4	4	10
Sanitary supplies, etc.	20	20	20	2	2	4	5
Attendance, cleaning, etc.	30	30	30	5	12	15	20
Total monthly oper- ating costs	69	71	72	9	22	33	45
Total annual overhead and operating costs:							
With 1 month use . .	440	941	1,168	147	367	421	680
With 6 months' use . .	785	1,296	1,528	192	477	586	905
With 12 months' use. .	....	....	....	246	609	...	1,175

Cost per day of work obtained from occupants with varying amounts of annual use
(assuming 25 workdays per month for each worker capacity), dollars

Workdays per season of use:	25 (1 month)	1.88	2.34	0.98	2.45	0.84	1.51
25 (1 month)	0.88	1.88	2.34	0.98	2.45	0.84	1.51
50 (2 months)	0.51	1.01	1.24	0.52	1.30	0.45	0.81
75 (3 months)	0.39	0.72	0.87	0.37	0.91	0.32	0.57
100 (4 months)	0.32	0.58	0.69	0.29	0.72	0.26	0.45
150 (6 months)	0.26	0.43	0.51	0.21	0.53	0.20	0.34
200 (8 months) . . . . .	....	0.36	0.42	0.18	0.43	0.16	0.28
250 (10 months) . . . . .	....	....	0.36	0.15	0.38	....	0.24
300 (12 months) . . . . .	....	....	....	0.14	0.34	....	0.22

Costs in family camps or separate units occupied for the same length of time are higher than in camps for single men, because a family must be sheltered to provide a single worker, whereas 2 to 4 single men can be housed in a family shelter. A camp for single men requires mess facilities, which may possibly introduce losses from their operation. When the type of work permits the employment of women and children, family facilities provide housing at a comparable cost per day of work obtained. No. 13, furnishing 20 workers for 2 months or 50 workdays each, has a cost of 45 cents a day, as compared with no. 9, which, with similar facilities, shows for the same period a cost of \$1.01 a day. If, however, each family unit in no. 9 furnished 1 1/2 workers, the cost would be 68 cents per workday obtained; or 2 workers, 51 cents.

All costs in tables 1 and 2 are based on full utilization for the period facilities are operated. Low utilization, low employment, or poor administration could result in much higher cost per workday. Conceivably, on the other hand, individual farmers can provide housing at less expense through a combination of economics and favorable circumstances. As the tables show, costs per day of work obtained from the occupants of any facility are reduced as the period of use increases. The best facilities will be too expensive if the period of use is short. The farmer who plans to provide housing facilities should first determine how long he can profitably use them--whether 1 month, 2 months, or 12. He may then compare the costs per day of work obtained for the appropriate period through use of the different types of housing shown in tables 1 and 2. Or he may by the same method prepare cost estimates for other facilities that would meet his needs. He will probably decide on some daily cost beyond which he does not con-

sider it wise to go in providing accommodations. He can then select facilities that will meet this cost; or, if his period of employment is short and the cost would be too high, he may decide to depend on workers housed off the farm.

Larger camps than any shown in table 2, housing more workers, serving several farmers with different crops, and hence having a longer period of operation, could reduce the actual cost of housing. Transportation of workers and administration of such a camp introduce, however, other expenses of considerable magnitude. Several employers' associations are currently operating camps for Mexican Nationals. Other smaller groups are sharing facilities or are housing workers for one another. Such plans merit investigation as a means of accommodating seasonal workers in a particular locality.

Individual farm housing for help has certain advantages that would overcome some higher costs. If facilities are adequate to meet the requirements of the workers sought, such housing offers the following advantages:

1. An adequate supply of workers can more readily be obtained and held.
2. The farmer with housing to offer has more choice in selecting his workers.
3. Workers housed on the farm are more dependable.
4. Most of the time and cost of transportation to and from work are saved.
5. There is an opportunity for better employee-employer relations, which, if properly developed, will mean better service by employees and relief from certain worries and responsibilities for the farmer.

